In the Claims:

1. (Cancelled).

2. (Currently Amended) A method for detecting toxic materials in a water sample using an electrochemically active bacteria comprising ~~the steps of~~:
a. screening out ~~the suspension and~~ unwanted materials in ~~a sample~~ the water sample, the water sample having a toxic material that affects the electrochemically active bacteria;
b. introducing activated sludge having the electrochemically active bacteria into an anode compartment of a microbial fuel cell so that the electrochemically active bacteria in the sludge are attached to an electrode in the anode compartment and form an enrichment culture, which generates an electrochemical signal, ~~simultaneously or subsequently,~~ and incorporating water saturated with air into a cathode compartment of the microbial fuel cell to keep a certain potential difference so as to make an efficient biological electrochemical reaction;
c. determining the electrochemical signals generated from the microbial fuel cell;
d. introducing the ~~sample~~ water sample to the anode compartment of the microbial fuel cell; and
e. determining the degree of electrochemical signal changes from the microbial fuel cell after introducing the ~~sample~~ water sample to the microbial fuel cell.

3. (Cancelled)

4. (Currently Amended) A device for detecting toxic materials in a water sample comprising:
a. a ~~sample~~ water sample inlet pump;
b. a first pretreatment tank for treating the ~~sample~~ water sample;
c. a microbial fuel cell for detecting the changes in the current due to the entry of any toxic materials that affect electrochemically active bacteria,
wherein the microbial fuel cell comprises an anode compartment and a cathode compartment, ~~and~~ the anode compartment ~~acts~~ acting as a catalyst by attaching the ~~an~~ electrochemically active bacteria ~~at the time of entering~~ when activated sludge ~~including~~ containing the electrochemically active bacteria ~~into~~ enters the microbial fuel cell;

d. a Personal Computer(PC) and controlling part for controlling the value of the signals and automatically determining the toxicity;

e. a solenoid valve which changes the flow of the ~~sample~~ water sample when detecting the entry of the toxic materials; and

f. a sample-gathering vessel which intakes and stores the ~~sample~~ water sample when the entry of the toxic materials are sensed.

5. (Cancelled).